

IN THE CLAIMS

1-13. (Cancelled)

14. (Currently Amended) A fuel in the form of an emulsion comprising pyrolysis liquids, natural and/or mineral oils and one or more emulsifiers, said emulsifiers selected from the group of compounds that form an oil-in-water emulsion, a bicontinuous emulsion and a water-in-oil emulsion[, wherein the emulsion does not include a microemulsion].

15. (Previously Presented) The fuel of claim 14 wherein the emulsifier is selected from the group consisting of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, anionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, and combinations of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18 and non-ionic surfactants having an HLB of from 4 to 18.

16. (Previously Presented) The fuel of claim 15, wherein the content of surfactant is up to 3% by weight based on the total weight of the emulsion.

17. (Previously Presented) The fuel of claim 15, wherein the fuel is a water-in-oil emulsion having a ratio of pyrolysis liquid to mineral oil or natural oil in the range of 1 to 45% by weight.

18. (Previously Presented) The fuel of claim 15, wherein the fuel is a bicontinuous emulsion having a ration of pyrolysis liquid to mineral oil or natural oil in the range of from 45% to 55% by weight.

19. (Previously Presented) The fuel of claim 15 wherein the fuel is an oil-in-water emulsion having a ratio of pyrolysis liquid to mineral oil or natural oil in the range of from 55% to 99% by weight.

20. (Previously Presented) The fuel according to claim 14 that includes a co-emulsifier that is a non-ionic surfactant having an HLB of from 4 to 18.

21. (Previously Presented) The fuel of claim 20 wherein the co-emulsifier is present in an amount of from 0.05% and 0.5% by weight.

22. (Previously Presented) The fuel according to claim 14, wherein the pyrolysis liquid is present in an amount of from 55% to 99% by weight.

23. (Previously Presented) A process for preparing the fuel according to claim 14, wherein a non-ionic block copolymer (or homopolymer) surfactant having an HLB of from 4 to 18 is added to mineral or natural oil in a homogenizer, and thereafter the pyrolysis liquid is added to the resulting mixture in the homogenizer and mixed to form a water-in-oil emulsion.

24. (Previously Presented) A process for preparing a fuel according to claim 14 that is a bicontinuous emulsion, wherein mineral or natural oil and the pyrolysis liquid are added to a homogenizer and mixed to form an emulsion, the ratio of pyrolysis liquid to mineral oil or natural oil being in the range of from 45% to 55% by weight.

25. (Previously Presented) A process for preparing fuel according to claim 14, wherein an emulsifier selected from the group consisting of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, anionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18 and combinations of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18 and non-ionic surfactants having an HLB of from 4 to 18 is added to the pyrolysis liquid; and thereafter the natural and/or mineral oil is added to the resulting mixture during emulsification to form an oil-in-water emulsion.

26. (Currently Amended) A process for preparing a fuel that is a bicontinuous

emulsion, which process includes the steps of:

adding an emulsifier selected from the group consisting of non-ionic surfactants having an HLB of from 4 to 18, non-ionic homopolymer surfactants having an HLB of from 4 to 18, and combinations of [such surfactants] said non-ionic homopolymer surfactants and non-ionic surfactants having an HLB of from 4 to 18, to mineral oil and/or natural oil and pyrolysis liquid; and mixing the emulsifier, oil, water and pyrolysis liquid in an homogenizer to form an emulsion.

27. (Previously Presented) The process of claim 26, wherein the mineral oil and/or natural oil is added to the homogenizer during emulsification.

28. (Currently Amended) A process for preparing a fuel that is a water-in-oil emulsion which comprises the steps of:

adding an emulsifier selected from the group consisting of non-ionic homopolymer surfactants, block copolymer surfactants, and non-ionic homopolymer surfactants having an HLB of from 4 to 18 and a combination of such surfactants and non-ionic surfactants haivng an HLB of from 4 to 18 to mineral oil and/or natural oil and water, the pyrolysis liquid, and water; and mixing the emulsifier and oil to form an emulsion.

29. (Currently Amended) A process for preparing a fuel that is a bicontinuous emulsion which includes the steps of:

a. adding an emulsifier selected from the group consisting of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, anionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, and combinations of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18 and non-ionic surfactants having an HLB of from 4 to 18 to the pyrolysis liquid;

b. mixing the surfactant and the pyrolysis liquid in an homogenizer to form an emulsion; and

c. adding [the] a natural oil and/or [the] a mineral oil to the mixture during emulsification.

30. (Previously Presented) An internal combustion engine powered by the fuel of claim 14.

31. (Previously Presented) A fuel for internal combustion engines, the fuel being in the form of an emulsion that is not a microemulsion, the emulsion comprising pyrolysis liquids, natural and/or mineral oils and emulsifiers selected from the group of compounds that form an oil-in-water emulsion, a bicontinuous emulsion and a water-in-oil emulsion.

32. (Previously Presented) The fuel of claim 31, wherein the emulsifier is selected from the group consisting of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, anionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18, and combinations of non-ionic block copolymer (or homopolymer) surfactants having an HLB of from 4 to 18 and non-ionic surfactants having an HLB of from 4 to 18.